



national

The 2010 FIFA World Cup™ offered South Africa a unique opportunity to demonstrate to the world its commitment to responsible environmental management, while improving the living environment and the livelihoods of South Africa's people.

A large stadium at night, illuminated with blue spotlights. The stadium is filled with a large crowd of people. The text "greening 2010 programme" is overlaid on the image in a white, sans-serif font. The word "greening" is in a smaller font size than "2010", and "programme" is in a larger font size than "2010".

greening 2010 programme

JEREMY JOWELL



A team installing energy efficient floodlighting at one of the official training venues.

2.1 Aims

THE 2010 FIFA SOCCER WORLD CUP™ offered South Africa the unique opportunity to demonstrate to the world its commitment to responsible environmental management, while improving the living environment and livelihoods of South Africa's people. In response to this opportunity, the DEA led the development of the National Greening 2010 Framework, which was published in 2008 following a number of national workshops with key stakeholders. The National Greening 2010 programme had the following objectives (DEAT, 2008a):

- To create a model for hosting international sporting (and other) events and conferences in an environmentally sustainable manner in developing countries
- To minimise the negative environmental impact of events associated with the World Cup by reducing resource consumption and waste production
- To build national capacity to host green events and translate this capacity into new economic opportunities and livelihoods for South Africans
- To improve environmental management performance by upgrading infrastructure used during World Cup events
- To raise awareness about environmental best practice in all sectors involved in planning and hosting the World Cup
- To raise awareness about sustainable development in South Africa.

The Framework targeted six environmental focus areas while a further four cross-cutting themes were identified to strengthen implementation approaches within the focus areas.

The overall outcomes of the National Greening 2010 programme were anticipated to be:

- A reduced environmental footprint from the 2010 FIFA World Cup™
- Legacy projects which take forward the benefits of Greening 2010, including being a catalyst for a National Greening Framework, and informing future FIFA World Cup™ events, detailed in Table 1.



TABLE I. SOUTH AFRICA'S FRAMEWORK FOR GREENING 2010 (Source: DEA, 2008a)

FOCUS AREAS	CROSS CUTTING THEMES	OUTCOMES	IMPACTS
<ul style="list-style-type: none"> • Waste • Energy • Transport • Water • Biodiversity • Responsible tourism 	<ul style="list-style-type: none"> • Carbon offset and emission reduction programmes • Sustainable procurement • Job creation • Communication and outreach 	<ul style="list-style-type: none"> • Environmental footprint for 2010 World Cup™ is reduced • Legacy projects take forward the benefits of Green Goal 2010 • Citizens see the benefits and understand the value of responsible environmental management • Reduced carbon emissions 	<ul style="list-style-type: none"> • Impact of the event on global warming is reduced • SA's long-term development path becomes more sustainable
Monitoring, Reporting, Evaluation and Impact Assessment			

2.2 Roles and responsibilities

A KEY TO THE SUCCESS of the National Greening programme would be for clear roles and responsibilities to be defined amongst the various roleplayers. The National Greening 2010 Framework identified the following key roleplayers in this regard:

The LOC

The LOC was responsible for setting objectives and overseeing the performance of all LOC sub-structures in preparing for and implementing the 2010 World Cup. The LOC had the following specific responsibilities in relation to Greening 2010:

- Ensure that greening is given a high profile in communication of the objectives and achievements of the 2010 FIFA World Cup™
- Develop guidelines for minimum environmental standards for Greening 2010
- Develop a standardised national approach to waste source separation in the stadium precincts for the Host Cities
- Co-ordinate communication, with support from DEA, around specific environmental components
- Co-ordinate the training of environmental volunteers for FIFA official venues
- In conjunction with the DEA, the Host Cities and other partners, devise monitoring and evaluation formats and outputs to assist the Host Cities in assessing their greening performance before, during and after 2010.

The DEA

The DEA played a critical role in relation to National Greening 2010, including:

- Providing support to the LOC Environmental Forum
- Providing guidance and coherence to the wide range of localised greening initiatives underway
- Mobilising and co-ordinating support from national government departments, donors and other greening partners
- Mobilising resources and funding to support and implement provincial and local plans
- Driving the carbon offset programme at a national level.

In addition to, and in conjunction with the LOC Environmental Forum, the DEA undertook to give informal support to the Host Cities in assessing their environmental management objectives and performance, and to assist the LOC in producing a legacy report, based on Host City and LOC Forum assessments. In effect, DEA has taken on this last task in its entirety, as it did also with respect to devising monitoring and evaluation formats and outputs.

A KEY TO THE SUCCESS OF THE NATIONAL GREENING PROGRAMME WOULD BE FOR CLEAR ROLES AND RESPONSIBILITIES TO BE DEFINED AMONGST THE VARIOUS ROLE PAYERS



THE FRAMEWORK TARGETED SIX ENVIRONMENTAL AREAS WHILE A FURTHER FOUR CROSS CUTTING THEMES WERE IDENTIFIED TO STRENGTHEN IMPLEMENTATION APPROACHES WITHIN THE FOCUS AREAS

Provincial governments

Provinces were expected to play an important role in supporting municipalities, in supporting the greening of the designated practice stadia, and in supporting events in locations beyond the nine Host Cities. Provincial environmental management and tourism authorities were seen to have a particularly important role to play in supporting and promoting regional biodiversity and greening initiatives, and in guiding initiatives to strengthen waste processing and recycling.

Municipalities

The primary task of implementing Greening 2010 lay with the nine cities that hosted the 64 matches of the World Cup and their associated events. Each of the Host Cities was responsible for designing and implementing initiatives related to the core focus areas and cross-cutting themes. To this end they developed business plans for their greening programme, a process which, in cases where the Host City was poorly resourced financially, was supported by the DEA.

On a location by location basis, Host Cities were to assess what resource conservation and efficiency options were desirable, feasible and achievable. Besides implementing environmental management systems (EMS) at the various stadiums and fan parks, each municipality was expected to meter and audit water and energy consumption and waste generation at different points within its stadium precinct and other venues in order to track environmental performance. After the event, each Host City was to submit to the LOC a report on their achievements in greening for the World Cup against the performance objectives detailed in their business plans (as per section 2.5 below).

Other role-players

Particular national sector departments and parastatals also had a significant role to play in the Greening programme. These included the Department of Water Affairs (Working for Water); Department of Transport; Department of Energy; Eskom, National Energy Efficiency Agency and CEF; Department of Agriculture, Forestry and Fisheries and the Department of Human Settlements.

The South African National Biodiversity Institute (SANBI) was appointed by DEA to co-ordinate the implementation of the Expanded Public Works Programme-related (EPWP) national Greening 2010 projects aligned with SANBI's mandate.

SANParks, in conjunction with the National Energy Efficiency Agency and the CEF, was to implement a R575-million infrastructure upgrade of its 23 national parks, to showcase energy efficient installations to local and international visitors during the 2010 World Cup™ and beyond. It was further anticipated that the hospitality industry had an important role to play in promoting and enabling responsible tourism. The development of a national environmental rating system for the hospitality industry was mooted.

Finally, FIFA, as the country's 'client' and tournament owner, was required to play a critical role in supporting environmental initiatives, in promoting the visibility of messages around Green Goal 2010, in addition to their participation in the LOC Environmental Forum.

2.3 Financing

THE PRIMARY RESPONSIBILITY FOR FUNDING Greening 2010 initiatives lay with the Host Cities, with funds being sourced primarily from each city's overall capital and operating budget. The DEA committed R34 million from its

SANParks, in conjunction with the National Energy Efficiency Agency and the CEF, was to implement a R575-million infrastructure upgrade of its 23 national parks





Social Responsibility Policy and Projects programme to support Greening 2010 over a three year period. This funding was to support initiatives aligned to the EPWP in at least four areas:

- Waste minimisation and waste recycling projects
- Energy efficiency (energy saving and demand side management), working in partnership with Eskom and other role-players, and training of energy auditors
- Training and placement of environmental volunteers, who could act as advocates for sustainable environmental management in their communities after the event
- Labour-intensive development of small-scale infrastructure.

The DEA sought support from both national and international bodies to help achieve the objectives of the National Greening Framework. While some of the cities diverted funds from other long term programmes to support their 2010 initiatives, others reported funding constraints as a major reason for limiting the extent of their Greening projects. In this regard, the omission of significant environmental obligations (in terms of FIFA's Host Agreement and List of Requirements) is likely to have presented particular challenges to later efforts to apply sustainable principles to the hosting of the World Cup. Host Cities and other role-players may, understandably, have afforded a lower priority in allocating budget and human resources to environmental legacy initiatives when compared with legally-binding obligations to which Host Cities had signed.

Some attempts were made by various organisations, including the DEA, to secure corporate sponsorship funding and participation. However these efforts were made exceedingly complicated by commercial restrictions protecting the rights of official 2010 FIFA World Cup™ sponsors.



A Green Goal Workshop: planning and preparations started many years in advance of kick-off.

2.4 Monitoring and evaluation tool

A KEY ELEMENT TO IMPROVING ENVIRONMENTAL PERFORMANCE is the ability to monitor and track various sustainability indicators. To this end, a DEA-commissioned monitoring tool was distributed to Host Cities on 1 May 2010, with a request that they implement it and report the results to the Department after the World Cup. Unfortunately, the monitoring tool was not widely utilised by Host Cities mainly because the cities had either put in place their own monitoring and evaluation systems or lacked the budget and/or human resources to undertake detailed monitoring. For some Host Cities, the basic infrastructure needed (on the ground) for providing the data to populate the monitoring tool was simply absent. For instance, to evaluate the energy savings of the stadiums, data from stadiums is required in a disaggregated fashion i.e. energy use for lighting versus energy use for air conditioning of corporate suites. However, several of the stadiums are equipped with only a single water and electricity meter. The costs of commissioning water and energy measurement in particular parts of the stadium complex were not justifiable in relation to the value of the outputs.

2.5 LOC Green Goal 2010 targets

AS MENTIONED PREVIOUSLY, the LOC (with support from the DEA) also developed a series of Green Goal 2010 targets to guide the environmental initiatives of Host Cities. The Green Goal 2010 targets, in contrast to the National Greening 2010 Framework targets, were quantitative. The setting of quantitative targets proved, for the most part, to be overly ambitious. For most municipalities, there were inadequate resources (financial, human resource and time) to allow for monitoring mechanisms to be put into place in order to assess environmental performance against quantitative targets.



2.6 National Greening objectives

THE DEA'S NATIONAL GREENING PROGRAMME was oriented to the support of Host Cities in their efforts at greening the World Cup. The DEA elected not to set quantitative targets in the National Greening 2010 Framework. This was in recognition of the differences in financial and human resources between Germany and South Africa, and in anticipation of the difficulties which municipalities, especially the smaller ones, would be likely to face in monitoring progress towards achieving quantitative targets. The Framework's objectives therefore aimed to provide a set of practical objectives for the various focus areas and cross cutting themes identified in the Framework, as summarised in Table 2.

TABLE 2. NATIONAL GREENING OBJECTIVES (Source: DEA, 2008a)

FOCUS AREAS	WASTE	<ul style="list-style-type: none"> Minimise waste generation Maximise waste sorting, re-use and recycling
	ENERGY	<ul style="list-style-type: none"> Minimise consumption of energy (improve efficiency of use) Maximise use of renewable energy
	TRANSPORT	<ul style="list-style-type: none"> Minimise use of private vehicles to access 2010 events and games Maximise availability, accessibility and efficiency of public transport systems Reduce carbon emissions from public transport systems Maximise access for pedestrians and cyclists, and provide appropriate surfacing and lighting
	WATER	<ul style="list-style-type: none"> Minimise consumption of water (improve conservation of water) Maximise rainwater capture and grey-water recycling Protect wetlands Minimise pollution of water resources
	BIODIVERSITY	<ul style="list-style-type: none"> Maximise protection and enhancement of biodiversity and ecological systems Maximise recreation and tourism experiences associated with biodiversity
	SUSTAINABLE TOURISM	<ul style="list-style-type: none"> Maximise energy and water use efficiency in all hotels, guest houses and B&Bs Minimise waste generation in hotels, guest houses and B&Bs, and maximise waste sorting, re-use and recycling Establish an environmental rating system based on clear criteria and standards Maximise opportunities to sensitize visitors to the need to conserve water and energy
CROSS-CUTTING THEMES	CARBON FOOTPRINT	<ul style="list-style-type: none"> Minimise carbon emissions Where carbon emissions cannot be eliminated, maximise the benefits to South Africa by setting up carbon-offset programmes located within South Africa or in African countries
	COMMUNICATIONS & AWARENESS	<ul style="list-style-type: none"> Inclusive information sharing about what is being done through Greening 2010 and why it is being done Outreach to residents and visitors beyond matches, fan parks and events Sensitisation of vendors and service providers to Greening 2010 objectives Involvement of schools and the youth Showcasing and explanation of water-wise technologies, energy-efficient appliances, and waste recycling initiatives Communication to the FIFA Family, including sponsors
	JOB CREATION	<ul style="list-style-type: none"> Maximise job creation and skills development Link to the Expanded Public Works Programme
	SUSTAINABLE PROCUREMENT	<ul style="list-style-type: none"> Procurement from suppliers who practice responsible environmental management Maximise use of local products and local enterprises



2.7 The sustainable legacy challenge

THE GREENING OF THE 2010 FIFA WORLD CUP™ presented major challenges to the Host Cities, as well as to national and provincial government bodies involved in the process. Some of the challenges faced included:

- Limited existing infrastructure, systems and experience, not to mention the change in public mind-set, required to achieve significant sustainability outcomes. While to some extent these present clear legacy opportunities (i.e. more space for improvement), it also imposes certain limitations in terms of what can be achieved in the short term.
- As it became apparent during the auditing phase of this report, most municipalities did not have reliable systems in place for the measurement of sustainability-related metrics at a Host City level, making it extremely difficult to gather quantitative data on progress made in relation to sustainability targets for waste, water and carbon emissions.
- Environmental criteria did not form a significant part of the Host City agreements or any other legal obligations made to FIFA in terms of the hosting of the World Cup. Arguably, this led to environmental issues being seen to some extent as “optional” and afforded lower priority compared to other areas that were related to legally binding obligations, such as logistics and security.

Despite these challenges, it is clear that a significant sustainable legacy, as described in the chapters that follow, has been achieved. The greening of the World Cup and resulting sustainable legacy outcomes should also be seen as part of a greater process – and, in fact, as part of the start of this greater process – to fundamentally embed the concepts of sustainability within South Africa’s national economic development framework.

THE GREENING OF THE WORLD CUP ... SHOULD ALSO BE SEEN AS PART OF A GREATER PROCESS TO FUNDAMENTALLY EMBED THE CONCEPTS OF SUSTAINABILITY WITHIN SOUTH AFRICA'S NATIONAL ECONOMIC DEVELOPMENT FRAMEWORK



The new Moses Mabhida Stadium.